

CLAIMS

1- (currently amended) A base station (100) devised for indoor use in a WCDMA network, comprising a support unit (401)-including a power supply unit (303), said support unit (401)-being adapted to be attached to a support structure, and a complete base station unit (402)- mechanically supported by said support unit, said base station (100) being characterised in that said complete base station unit (402) is being designed as a separate docking unit locked in said support unit (401)- by cooperating snap locking means (602, 703)- arranged in said support unit (401)- and base station unit (402), allowing an easy installation/removal of said complete base station unit (402)- in/from said support unit (401).

2- (cancelled) The base station (100) according to claim 1 further **characterised in that said complete base station unit (402) is designed as a separate docking unit locked in said support unit (401) by cooperating snap locking means (602, 703) arranged in said support unit (401) and base station unit (402), allowing an easy installation/removal of said complete base station unit (402) in/from said support unit (401).**

3- (currently amended) The base station (100)- according to claim 1, ~~or 2~~ further **characterised in that wherein** said power supply unit (303)- housed in said support unit (401)- comprises an AC/DC converter feeding said complete base station unit (402) with a DC-voltage.

4- (currently amended) The base station (100)- according to ~~any of~~ claims 1 ~~to 3~~ 2- further **characterised in that wherein** said base station unit (402)- has a sandwich structure comprising a rigid metal back plate (1201), a rigid metal front plate (1208), and a main circuit board (1206) attached intermediate said back plate and front plate (1208).

~~5.~~(currently amended) The base station ~~(100)~~ according to claim ~~4~~3,
~~wherein~~wherein said rigid metal back plate ~~(1201)~~ comprises cooling flanges
~~(1601)~~.

5 | ~~6.~~(currently amended) The base station ~~(100)~~ according to claim ~~5~~4
~~wherein~~wherein said back plate's ~~(1201)~~ cooling flanges ~~(1601)~~ are arranged on
the side facing away from said circuit board ~~(1206)~~ whereby said main circuit
board ~~(1206)~~ is cooled by means of self-convection through said back plate
~~(1201)~~.

10 | ~~7.~~(currently amended) The base station ~~(100)~~ according to ~~any of claims 4-6~~3-5
~~wherein~~wherein all circuits of a control processing block, a base band
processing block and an RF block are arranged on said main circuit board ~~(1206)~~

15 | ~~8.~~(currently amended) The base station ~~(100)~~ according to ~~any of claims 7~~claim
~~6~~ further ~~characterised in that~~wherein said main circuit board ~~(1206)~~
comprises border portions ~~(1207)~~ dividing the main circuit board in sections
with separate circuits for said blocks, and where said front plate comprises inner
20 | walls ~~(1501)~~ with end portions engaging said border portions ~~(1207)~~ for
shielding said separate circuits from each other.

25 | ~~9.~~(currently amended) The base station as recited in ~~any of claims 4-8~~3-7
~~further characterised in that~~wherein it comprises a transmission interface block
realised in form of a separate circuit board ~~(1210)~~, which is attachable to the
main circuit board ~~(1206)~~ by means of a contact interface, thereby allowing an
easy substitution of said circuit board ~~(1210)~~.

30 | ~~10.~~(currently amended) The base station ~~(100)~~ according to ~~any of the preceding~~
~~claims~~claim 1 ~~characterised in that~~wherein said support unit ~~(401)~~ comprises
support members ~~(601)~~ and said base station unit ~~(402)~~ comprises cooperating

hanger members (701) which are devised to connect to said support members (1601) in a pivoting engagement, and ~~wherein~~wherein said snap locking means (602, 703) are included in said support (401)-unit and in said base station unit (402), which are devised to engage with each other by pivoting said base station unit.

~~11. (currently amended)~~ The base station (100) according to claim ~~10-9~~
~~characterised in that~~ wherein said snap locking means (602, 703) are formed by an inwardly projecting knob on a side wall of the support unit (401), and a cooperating recess in the base station unit (402), ~~wherein~~wherein engagement of the knob and the recess locks said base station unit (402) from moving vertically upwards and horizontally outwards from the support unit (401).

~~12. (currently amended)~~ The base station (100) according to claim ~~10-9~~
~~characterised in that~~ wherein said snap locking means are realised by means of spring-loaded engaging means arranged on a side wall of said support unit (401) and a cooperating recess in a side wall of said base station unit (402).

~~13. (currently amended)~~ The base station (100) according to ~~any of the preceding claims~~Claim 1 ~~characterised in that~~ wherein said base station (100) comprises at least one interface for connecting an external alarm equipment with ~~the~~ a control processing circuit (1404) of said base station (100), thereby allowing the establishment of a communication channel between said external alarm equipment and a central alarm station.

~~14. (currently amended)~~ The base station (100) according to ~~any of the preceding claims~~Claim 1 ~~characterised in that~~ wherein said base station (100) comprises a handle (702) at a side portion, allowing the base station to be carried.

~~15. (currently amended)~~ The base station (100) according to claim ~~14-13~~
~~characterised in that~~ wherein said handle (702) is arranged on the lower end of

said base station unit (402), when the base station unit (402) is installed in said support unit (401), and that said handle (702) further comprises a cable race groove.

5 | ~~16. (currently amended)~~ The base station (100) according to claim ~~15~~ 14 ~~characterised in that wherein~~ at least one cable contact is positioned at the lower end of said base station, when the base station unit (402) is installed in said support unit (401), under said handle and tilted about 45 degrees.

10 | ~~17. (currently amended)~~ The base station (100) according to ~~any of the preceding claims~~ Claim 1 ~~characterised in that wherein~~ it comprises an internal antenna (403) covered by a front cover (404) of an electromagnetically transparent material.

15 | ~~18. (currently amended)~~ Base station (100) devised for indoor use in a WCDMA network, comprising a base station unit (402) having an interface (1405) for connection to a power supply (303), a radio network controller, RNC, and to an antenna (403), said base station unit having a sandwich structure comprising a rigid metal back plate (1201), a rigid metal front plate (1208), and a main circuit board (1206) attached intermediate said back plate (1201) and front plate (1208), ~~wherein~~ wherein all circuits of a control processing block (1404), a base band processing block (1402) and an RF block (1401) are arranged on said main circuit board (1206).

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25 | ~~19. (currently amended)~~ The base station as recited in claim ~~18~~ 17, ~~wherein~~ wherein said rigid metal back plate (1201) comprises cooling flanges (1601).

30 | ~~20. (currently amended)~~ The base station as recited in claim ~~19~~ 18, ~~wherein~~ wherein said cooling flanges (1601) are arranged on a side facing away from said circuit board (1206), and ~~wherein~~ wherein said main circuit board

(1206) is cooled by means of self-convection of said back plate.

21. ~~(cancelled)~~ The base station (100) according to ~~any of claims 18-20~~ wherein all circuits of a control processing block (1404), a base band processing block (1402) and an RF block (1401) are arranged on said main circuit board (1206).

22. (currently amended) The base station as recited in any of claims ~~17-21~~ further **characterised in that** wherein said main circuit board (1206) comprises border portions (1207) dividing the main circuit board in sections with separate circuits for said blocks, and where said front plate (1208) comprises inner walls (1501) with end portions engaging said border portions (1207) for shielding said separate circuits from each other.

23. (currently amended) The base station according to ~~any of claims 18-22~~ ~~17-20~~, ~~wherein~~ wherein said front plate (1208) comprises a mechanical interface for attaching an internal antenna (403), and ~~wherein~~ wherein said antenna is covered by a front cover (404) of an electromagnetically transparent material.

24. (currently amended) The base station as recited in ~~any of claims 21-22~~ ~~19-20~~ further **characterised in that** wherein the control processing block (1404) and Radio Frequency block (1401) of said main circuit board (1206) are arranged in separate shielded compartments formed between said front plate (1208) and back plate (1201), whereby said control processing block (1404) and Radio Frequency block (1401) are electromagnetically shielded from other electric circuits of the base station (100).

25. (currently amended) The base station as recited in ~~any of claims 20-24~~ ~~18-22~~ further **characterised in that** wherein a transmission interface block is realised on a separate circuit board (1210), which is attachable to the main circuit board (1206) by means of a contact interface, thereby allowing the easy substitution of said circuit board (1210).

26-(currently amended) The base station according to claim 25-23 further
~~characterised in that~~ wherein said circuit board (1210), a base band processing
 block (1402) and a DC/DC block (1403) of said circuit board (1206), are
 5 arranged in separate shielded compartments formed between said front plate
 (1208) and back plate (1201), and whereby said circuit board (1210), base
 band processing block (1402) and DC/DC block (1403) are electromagnetically
 shielded from other electric circuits of the base station (100)..

27-(currently amended) A cellular radio network, including one or more macro
 base stations, ~~characterised in that~~ wherein said network further comprises a
 base station devised for indoor use in a WCDMA network, comprising a support
unit including a power supply unit, said support unit being adapted to be
attached to a support structure, and a complete base station unit mechanically
 15 supported by said support unit, said complete base station unit being designed as
a separate docking unit locked in said support unit by cooperating snap locking
means arranged in said support unit and base station unit, allowing an easy
installation/removal of said complete base station unit in/from said support
unit according to any of claims 1-2624.

28-(currently amended) Method for assisting the installation of a base station
 (100) for indoor use in a WCDMA network, which base station comprises a
 support unit (401) including a power supply unit (303), and a complete base
 station unit (402) mechanically supported by said support unit (401),
 25 comprising the steps of:

- mechanically attaching said support unit (401) to a support structure;
- mechanically ~~attaching~~ docking said base station unit (402) ~~into~~ the support
 unit (401) by engaging cooperating snap locking means (602, 703) arranged in
said support unit (401) and said base station unit (402);
- 30 - connecting the base station unit to a radio network controller, RNC, of said
 network, to an antenna (403), and to said power supply unit (303); and

- downloading application software and office data from a management tool to said base station unit, allowing the establishment of a communication channel between said base station unit (402) and said RNC .

5 | ~~29.(cancelled)~~ The method according to claim 28 wherein said step of mechanically attaching said base station unit (402) to the support unit (401) comprises the following step:
 10 | ~~- docking said base station unit (402) by engaging cooperating snap locking means (602, 703) arranged in said support unit (401) and said base station unit (402).~~

30.(currently amended) The method according to claim 28-26 wherein wherein said step of mechanically attaching said base station unit (402) to the support unit (401) comprises the following steps:

15 | - engaging hanger members (701) of said base station unit (402) with cooperating support members (601) of said support unit (401), and,
 - pivoting said base station unit (402) into engagement of cooperating snap locking means (602, 703) arranged in said support unit (401) and said base station unit (402).

20 | 31.(currently amended) The method according to any of claims 28-30 26-27 further comprising the steps of:

25 | - connecting an external alarm equipment to said base station unit (402),
 - downloading specific software for said external alarm equipment to the control block unit (1404) of said base station unit (402), allowing the establishment of a communication channel between said alarm equipment and a central alarm station.

30 | 32.(currently amended) The method as recited in claim 28 26, comprising the step of :

- connecting said management tool directly to said base station unit by means of

a Local Management Tool, for direct downloading of said application software and office data to the base station unit.

5 | 33.(currently amended) The method as recited in claim 2826, comprising the step of :

- connecting said management tool to a central radio network controller, RNC, of said network, for downloading of said application software and office data to the base station through said network.

10 | 34.(currently amended) Method for assembly of a base station unit as recited in ~~any of claims 178-246~~, comprising the steps of;

- 15 | - placing the back plate ~~(1201)~~ on an assembly support;
- placing the circuit board ~~(1206)~~ on the back plate ~~(1201)~~;
- attaching the circuit board ~~(1206)~~ to the back plate ~~(1201)~~;
- placing the front plate ~~(1208)~~ on the circuit board ~~(1206)~~; and
- attaching the front plate ~~(1208)~~ to the back plate ~~(1206)~~.